Preface

As stated by Hargreaves (2002), “we live in a world of endless and relentless change” (p. 189), and “in a complex and fast-changing society” (Hargreaves and Fink, 2003, p. 693). Societal changes include the changing nature and patterns of employment, population, and demographic changes, technological change, and globalization (Chapman, 1996; Fullan, 1993). Technology changes our world(s) endlessly and relentlessly. As Bigum and Kenway (2005) put it, it is generally associated with change in many fields and has a great impact on our schools, one of the most important leading organizations in society.

Most studies associated with the use of learning technology primarily focus on its implementation and impact on the learning environment. Yet, the increased use of technology for instructional purposes, for instance, has also caused some cyber philosophical debates about ethical and/or moral use of computers. These issues include, but are not limited to, privacy, piracy, safety, fairness, data security, equal access, intellectual property/copyright, computer crime, software reliability and some further issues, not named yet, following new technological developments in educational contexts as well as other settings (Burnam & Kafai, 2001; Collins & Miller, 1992; Chow, 2001; Croy, 1985; Gotterbarn, 1990, 1992; Johnstone, 2007; Lin, 2007; Marcovitz; 2006; Miller, 1988; Moor, 1985; Van Den Hoven & Lokhorst, 2002; Weckert, 2001, 2002; Williams Carr & Clifton; 2006). Consequently, the concept of computer ethics has come to be used in all [educational] settings.

Cyberphilosophy, according to Moor and Bynum (2002), is a term which designates to the intersection of philosophy and computing. Similarly, Floridi (2002, 2004) implies that the [ethical] question of “what is the nature of right and wrong?” is one of the field questions of that [cyber]philosophy [of information and ICT] (words in italics added for emphasis). Ethics is people’s desire to do good and the need to avoid doing harmful behavior (Macer, 2007). For Floridi, a good action decreases the amount of destruction of information world which is labeled as entropy of the infosphere, and a bad one increases it (Hongladarom, 2008). Hence, computer ethics, a relatively young discipline, is now one of the most important branches of ethics as a philosophical field (Adam, 2001; Adam & Ofori-Amanfo, 2000; Bynum, 1997; Ess, 2007; Tavani, 2001, 2004; Van Den Hoven, 1997). The concept of computer ethics, which refers to ethical problems aggravated, transformed, or created by computer technology was coined by Walter Maner in 1970s (Bynum, 2001, 2006). In the early 1980s, ethical issues in computing became one of the important issues of philosophers, computer scientists, and scholars (Van Den Hoven & Lokhorst, 2002).

Technology is the thing that makes computers unique, and this uniqueness make the field of computer ethics unique (Manner, 2002; Moor, 2001; Tavani, 2002). Computer ethics is viewed as a subfield of information ethics by some researchers. Luciano Floridi and his colleagues at Oxford University’s Information Ethics Research Group, for example, use the term ‘information ethics’ as a name for the specific metaphysical foundation of computer ethics (Bynum, 2006; Floridi, 1999, 2007, 2008; Floridi
This information ethics, according to Floridi (2001), “must be able to address and solve the ethical challenges arising in the new environment on the basis of the fundamental principles of respect for information [infosphere], its conservation and valorization” (p. 1). In other words, computer ethics is to deal with information privacy in that infosphere (Tavani, 2008). Similarly, if computers and the infosphere are to be used effectively and continuously, teachers, the closest practitioners to children, are expected to teach students about the potential dangers of unethical use of technology and ethical challenges arising in the education environment.

Baek, Jung, and Kim (2008) imply that “one of the most exciting changes in education is related to the word “technology” (p. 224). According to Ki and Ahn (2006), unethical use of ICT [technology] in education is a serious problem. Johnson and Simpson (2005) emphasize that “all educators who deal with technology need to understand the legal and illegal uses of intellectual property … [to] … provide ethical models for students to emulate” (p. 15). However, Riley (2004) assumes that a consideration of ethics is lacking in the planning process for instructional technology. Some of the researchers have argued that whether students and teachers are ethically linked together as a “community” or to the world through the use of technology (Prosser & Ward, 2000), mainly of computers. “The advance of ICTs,” for Roh (2004), “reveals negative consequences as well as positive functions and benefits” (p. 167) such as “hacking, infringements of privacy or intellectual property, uncontrolled access to obscene or pornographic material...” (p. 168). Baum (2005) affirms that “the ethical issues that accompany educational technology have become more apparent as more educators have integrated technology into the classroom” (p. 54).

We could label the debate above as we like; it is ethics in technology, computer ethics, ICT ethics, information ethics, cyberethics, or ethical issues of the information age. What is clear is that computer ethics is an issue that emerged with computer technology, and examines moral, legal, and social issues involving cyber technology (Brockhoff, 2004; Namlu & Odabasi, 2007). It is also obvious that ethics in use of learning technology, especially of computers, is now an important issue for practitioners and policy makers.

All teachers, as practitioners of ICT in learning setting, must feel responsible for educating students on “what is right and what is wrong?” of computer use, because “classroom practitioners have a much better sense of what is best for their students than do a group of software engineers working for a corporate software manufacturer” (Meeder, 2005, p. 58). Bennett (2005), for instance, proposes “modeling and teaching legal and ethical practices related to technology use” as the first of five guidelines for using technology in classroom. Kruger (2003) claims that “as computers become a larger part of the curriculum, educators everywhere are being asked to take a stand for cyberethics” (p. 188). Adam (2001) argues that “ethics, particularly an applied ethics such as computer ethics, is a potentially potent political force as ethical debate feeds into policy and, ultimately, into legislation. As a subject, ethics deals with theorizing the ways in which human behavior may be deemed desirable or undesirable.” He adds that “this signals a need to find explanations for such behavior, otherwise policy and legislation designed to regulate human conduct are unlikely to prove effective” (p. 236). That is to say that “the world of computing [computer ethics] requires a much more far-reaching exploration” (p. 259).

Keeping in mind that there is lack of policies and laws strictly prohibiting illegal/unethical uses of computers such as privacy, safety, data security, intellectual property/copyright, computer crime, software reliability, and there are no regular courses about computer ethics in many countries, it can easily be claimed that the issues above point out the importance of Advances in Cyber Ethics in Education series book project entitled “Ethical Technology Use, Policy, and Reactions in Educational Settings.” This book covers scholarly papers which are of timely and interesting to all researchers and practitioners in all educational and research settings.
The book is grouped into four thematic sections. In the first section the concept of cyber ethics is considered as a matter in its all bearings in seven articles, and the section is named as **Cyber Ethics as an Issue of Virtual Philosophy**. The first article, for example, entitled “Computer Ethics and Neoplatonic Virtue: A Reconsideration of Cyberethics in the Light of Plotinus’ Ethical Theory,” Giannis Stamatellos from Copenhagen University, argues that current trends and behaviours in online communication require an ethics of self-care found in Plotinus’ self-centred virtue ethics theory, and supports the position that Plotinus’ virtue ethics of intellectual autonomy and self-determination is relevant to cyberethics discussions involved in computer education and, particularly, the character-based moral act of moral agency applicable in computer education and netizenship. He claims that computer ethics is related to the systematic study of the ethical and social impact of computers and computer networks. In contemporary normative ethical theory, for Stamatellos, “computer ethics belongs to the area of applied ethics dealing with practical and everyday moral issues…and involves discussions on the moral principles that help the individual to make the right decision and act responsibly on a specific ethical problem: how we ought or ought not to act in a particular case.”

In the article entitled “The Tension between Human and Cyborg Ethics” by Anne Gerdes, the connection between biotechnology, treatment, and enhancement is discussed, stating the need for regulation, well aware of the fact that it is hard, but not impossible, to draw a firm line between a therapeutically and an enhancing use of biotechnology. Next, the ideas of transhumanism are presented as a framework for an examination of the human condition. Here, it is pinpointed that man cannot know anything essential about basic conditions of cyborg ethics. The second part of the article discusses what it means to be an ethical being from the perspective of Francis Fukuyama’s ideas of the importance of human nature to humanity, and further elaborated on by bringing attention to the significance of vulnerability to moral reasoning. Following this line of argument, the article suggests a near connection between embodiment morality, viewed as formed by human nature and further shaped through social interaction.

Talab and Botterbusch aim to investigate the ethical and legal considerations of constructivist and constructionist teaching in a graduate class in Second Life in their paper entitled “Constructivist and Constructionist Approaches to Graduate Teaching in Second Life: Ethical Considerations and Legal Implications.” The findings imply that ethical considerations in constructivist and constructionist teaching were time, appearance, skills, scaffolded instruction, playful exploration, vicarious experience, self-directed project development, construction of objects, constructivism and constructionism balance, social networking and collaboration, harassment and griefing, false identities and alternate avatars, chat log sharing, and copyright and trademark violations. In their paper entitled “Computer Teachers’ Attitudes toward Ethical Use of Computers in Elementary Schools” Özer, Beycioglu, and Ugurlu aim to explore elementary school computer teachers’ attitudes and awareness regarding ethical computer use in classrooms. They especially focus on attitude to and awareness of cyberethics and teaching practices of cyberethics. Results show that the participating teachers considered ethical use of computers and they were aware of the ethical problems of computer use. However they tend to undermine the ethical use of computers in practice because teachers have not been taught the basic principles of using computers ethically. The study titled “Teaching Cyberethics: Value Orientations as Predictors of the Acquisition of Moral Competence in a Course on the Social Consequences of Information Technology” by Holtz presents data from an evaluation of a course on the social consequences of information technology. The participants’ average level of moral competence did not change significantly; there was evidence that participants with a high degree of materialistic values were less likely to acquire moral competence during the course.
Alhawari and Talet, in “Ethical Decision Making with Information Systems Students: An Exploratory Study,” investigate the ethical issues in education in terms of Information Systems students’ attitudes at Saudi universities towards digital piracy; the differences in the ethical decision-making process; and ethical awareness and intention to perform questionable acts. Findings explored information technology ethics in several ways and significant differences were found in many cases between demographic groups based on ethical issues.

In his second paper, entitled “Virtue, Privacy and Self-Determination: A Plotinian Approach to the Problem of Information Privacy,” Stamatellos argues that the problem of information privacy should be reconsidered in the light of Plotinus’ virtue ethics and self-determination. For Stamatellos, an information privacy act should include a self-deterministic virtue ethics perspective: privacy should derive from the users themselves as virtuous agents who act in voluntariness, knowledge of their actions and informational self-determination.

In the second section the book, Cyber Ethical Issues: The Case of Higher Education, the issues related with ethical and/or responsible use of computers in higher education institutions are discussed. The papers collected in here, for Boyd, “represent responses by a range of academics to the challenge to consider ethical issues associated with the modern evolving university: specifically, the university becoming increasingly networked, socially, politically and geographically, while responding to growth in the use of communication technology which provides both a means to managing networks and the stimulus for further network development.”

“The Evolution of E-Learning Management Systems: An Ethical Approach,” a paper by da Silva, da Costa, Prior and Rogerson, builds on a consideration of e-learning definition and its ethical dilemmas, and human-centered learning concept and its dimensions, to examine the implications of integrating social and cultural contexts. Hoffman, Välimaa, Saarinen, Söderqvist, Raunio, and Korhonen aim to consider recent criticisms of management trends in higher education in their paper, entitled “The International SOLE™ of Finnish Higher Education: A Virtual Vanishing Act.” Finland, claim the authors, “is an interesting case because formerly key ethically-based strengths, based on vigorous, university-led societal debate, may be vanishing – in a virtual sense – under the nose of higher education stakeholders.” Kenon, in “Global Education Access Utilizing Partnerships and Networked Global Learning Communities,” examines implications for emerging trends in GLCs, and how these trends may be able to prepare, support, and promote access to higher education for disadvantaged socio-economic status high school students in the U.S. and in similar communities worldwide.

Ueno and Maruyama introduce and critique the attempt, through classroom teaching, to develop students’ communication skills and to enhance their moral consciousness as a indirect but ultimate solution for those problems in their paper, “The Significance of Network Ethics Education in Japanese Universities: A Global Citizenship Education for Building a Moral Community in the Globalized Network Society.” The use of the mobile phone in Portuguese classrooms in order to examine new practices of disclosure and transparency is analyzed by Ganito in the article entitled “Transparent Classrooms: How the Mobile Phone is Changing Educational Settings.” Nicholas and Lewis aim to reveal the attitudes of some Net Generation students towards the usage of electronic textbooks via in their paper, “The Net Generation and E-Textbooks.” Harris, Warren, Smith, and Carey claim that recent developments in modes of social interaction facilitated by Web 2.0 technologies have the potential to shift the traditional boundaries between educators and their students. Social networking tools such as Facebook, Twitter, Ning, Basecamp, and blogs promise to enrich university educational activities through their capability to support communication, groupwork, networking, and project archiving. In the paper entitled “Web
2.0: Privacy and Integrity in the Virtual Campus” they reflect on three personal narratives to examine some of these challenges.

**Digital Equity** is the third part of the book. This section focus on equal use of computers as one of the most debated issues in educational settings. Chan, in the paper entitled “How Do Technology Application and Equity Impact Student Achievement?” examines the impact of technology application on student achievement in the State of Georgia and highlights technology access of student from different socioeconomic status. Williamson, in “Digital Equity in Schools: An Overview of Current Trends,” reviews the most recent trends in digital equity for elementary, secondary, and post-secondary education, and analyzes 42 peer reviewed journal articles published in 2009-10 for trends in research and scholarly thought. In “Embracing Technology and Community Engagement as a Teaching and Learning Medium in Social Justice Education,” Naidoo examines the varied learning experiences that integrated socio-cultural theory, community engagement, and e-learning offered by the “Diversity, Social Justice, and Schooling” subject at the University of Western Sydney.

Papers in the last section, titled **Responsible Use of Computers**, reflect some issues in educational settings. Sincar, in the paper “An Analysis of Prospective Teachers’ Digital Citizenship Behavior Norms,” aims to analyze prospective teachers’ digital citizenship behavior norms. The sample consists of the seventeen prospective teachers who study in the University Of Gaziantep Faculty Of Education in the academic Year 2009-2010. In their paper entitled “Cheating in Exams with Technology,” Curran and Doherty investigate technology used to cheat in examinations, how such cheats are carried out and how to prevent such methods of cheating. To show the full extent of the progression of cheating over the years, the report also documents some of the traditional methods of cheating. The paper “Teaching Online: The Handbook Dilemma in Higher Education” by Söderström examines adult online education by investigating the complex relationship between technology and community. Analyzing several handbooks that aim to help teachers design and implement online education, the paper aims to explore online teaching in relation to the handbook dilemma teachers meet in their teacher profession by focusing on participation and sharing opportunities.

Using design-based research approaches, Asunka, in the paper entitled “Helping Students Avoid Plagiarism in Online Courses: A Design-Based Research Approach,” aims to investigate student plagiarism in an online course, with the objective of determining the instructional interventionist strategies that can help students avoid the practice in online courses.

Kadir Beycioglu  
Dokuz Eylul University, Turkey

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